

Date:
User:Wednesday, 07/01/2009 1:39:14 PM
Julie Dawson

Process Sheet

SPHIT-#3

Customer : CU-DAR001 Dart Helicopters Services

Drawing Name : STEP WELDMENT

Job Number : 44490-3

Estimate Number : 12576

P.O. Number :

This Issue : 07/01/2009

S.O. No. :

Prsht Rev. : NC

First Issue : 1/1

Previous Run : 43512

Type : LARGE FAB ASSY

Part Number : D3562041

Drawing Number : D3562 REV E

Project Number : N/A

Drawing Revision : E

Material :

Due Date : 30/01/2009

Qty: 1 Um: Each

Written By :

Checked & Approved By :

Comment :

Est Rev:A New Issue 06-11-09 JLM
 Est rev B ECN 987 07.10.09 EC verified by: DD
 Est Rev:C ECN1048 07-12-18 DD verified by:ec
 Est Rev:D 08-07-28 add chemical conversion coat DD
 verified by:EC

Additional Product

Job Number:



Seq. #:

Machine Or Operation:

Description :

1.0

D2622120C

Step Extrusion



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

Qty	Part #	Description	Batch:
1	D2622-120C	Extrusion	B44064

Check Material for any Dents or Defects

SAD 09-02-12¹²

2.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

1-Cut D2622 extrusion as per Dwg D3562

2-Deburr and bevel ends for welding

SAD 09-02-12 (4)

3.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

SAD 09-02-12 (4)

4.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Chemical Conversion Coat as per QSI 005 4.1

SAD 09-02-12 (4)

Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: STEP WELDMENT

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Part Number: D3562041

Job Number:



Seq. #:

Machine Or Operation:

Description :

5.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



42

Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

M-1 09/02/26

6.0

D3560041

Arm Weldment



Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

ARM WELDMENT

Batch: B41067

7.0

D3560043

Arm Weldment



SAD 09-02-26 (4)

Comment: Qty.: 1.0000 Each(s)/Unit Total : 4.0000 Each(s)

ARM WELDMENT

Batch: B41068

8.0

MS20600AD4W5

Blind Rivet



SAD 09-02-26 (4)

Comment: Qty.: 32.0000 Each(s)/Unit Total : 128.0000 Each(s)

Blind Rivet

batch: M110427

9.0

SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



SAD 09-02-26 (4)

Comment: SMALL & MEDIUM FAB RESOURCE 1

PTO

1- Transfer drill Rivet holes as per dwg D3562.

2-Touch-up rivet holes with alodine as per dwg d3562

3-Rivet legs using Magnabond as per dwg D3562.

*****Ensure to wipe off any excess magnabond *****

A/R Magnabond 6398

Batch: M108966

SAD 09-03-03 (3)

10.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

09/03/04 (43)

rospace Ltd

WORK ORDER CHANGES

STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

J: D3562-041 PAR #: PLA Fault Category: Prod / Assembly ^{med small} NCR: Yes No DQA: D Date: 09/03/12
 Resolution: Re-work Disposition: Re-work QA: N/C Closed: D Date: 09/03/12

WORK ORDER NON-CONFORMANCE (NCR)

44490-3

DATE

09.03.03 9.0

STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
		Initial Chief Eng	Action Description Chief Eng	Sign & Date			
	4 steps affected with 1 or 2 holes per step affected. Total 6 holes affected. Upon replacing rivets, Employee slightly ovalized the holes by O.C.S.	<i>[Signature]</i>	Re-train employee to drill straight <u>ONLY</u> removing the rivet head, and to punch out the remaining rivet. Not to drill all the way through. Also to properly stabilize the when working on it.	SAN 09-02-26	<i>[Signature]</i> 09/02/27	<i>[Signature]</i>	<i>[Signature]</i> 09-02-27
	R.C. Improper Improper technique.	<i>[Signature]</i>	Replace with rivets with no alternate rivets available. Remove the affected arms. Drill the affected holes with weld on both arms. Step. per O.C.S. Re-assemble w/ magna bond per spec, and transfer drill the affected holes After Assy as per drawing details. Re-align prior to Assy	SAN 09-02-26	<i>[Signature]</i> 09/02/27	<i>[Signature]</i>	<i>[Signature]</i> 09-02-27
		<i>[Signature]</i>		SAN 09-02-26	<i>[Signature]</i> 09/02/27	<i>[Signature]</i>	<i>[Signature]</i> 09-02-27

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Customer: CU-DAR001 Dart Helicopters Services













Drawing Name: STEP WELDMENT

Job Number: 44490

Part Number: D3562041

Job Number:



Seq. #:	Machine Or Operation:	Description :
11.0	D2734	Step End Plate
 		
Comment: Qty.: 2.0000 Each(s)/Unit Total: 8.0000 Each(s) Pick: Qty Part Number Description Batch 2 D2734 End Cap <u>43535</u> (E) BE 09/03/05		
12.0	LARGE FAB 1	LARGE FABRICATION RESOURCE 1
 		
Comment: LARGE FABRICATION RESOURCE 1 1-Weld end caps as per Dwg D3562& QSI 004. Inspect for foreign objects as per QSI 024. A/R Aluminum Rod <u>M109213</u> BE 09/03/05 2-Grind end cap welds flush as per Dwg D3562 <u>SAN 09-03-06</u> (D)		
13.0	QC9	VISUAL WELDING INSPECTION
 		
Comment: VISUAL WELDING INSPECTION <u>ID 09-03-06</u> (E)		
14.0	QC5	INSPECT WORK TO CURRENT STEP
 		
Comment: INSPECT WORK TO CURRENT STEP <u>S 09/03/06</u> (43-04)		
15.0	HAND FINISHING1	HAND FINISHING RESOURCE #1
 		
Comment: HAND FINISHING RESOURCE #1 Chemical Conversion Coat as per QSI 005 4.1 <u>A-m 09-03-06</u> (E)		
16.0	POWDER COATING	POWDER COATING
 		
Comment: POWDER COATING Powder Coat White Gloss (Ref: 4.3.5.1) as per QSI 005 4.3 START TIME: <u>7:35</u> OVEN TEMPERATURE: <u>320°</u> FINISH TIME: <u>8:05</u> <u>unm/1/1</u> <u>09-03-10</u> (E)		

Process Sheet

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Drawing Name: STEP WELDMENT

Job Number: 44490

Part Number: D3562041

Job Number:



Seq. #:

Machine Or Operation:

Description :

17.0

HAND FINISHING1

HAND FINISHING RESOURCE #1



Comment: HAND FINISHING RESOURCE #1

Wing Walk as per Dwg D3562 and QSI 005 4.4

Batch: 111015 ✓

510 02-03-10 (X)

18.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT/CHEMICAL CONVERSION

0903-10 (1)

19.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Pick Assembly Kit

0903/10 (1)

20.0

QC21

FINAL INSPECTION/W/O RELEASE



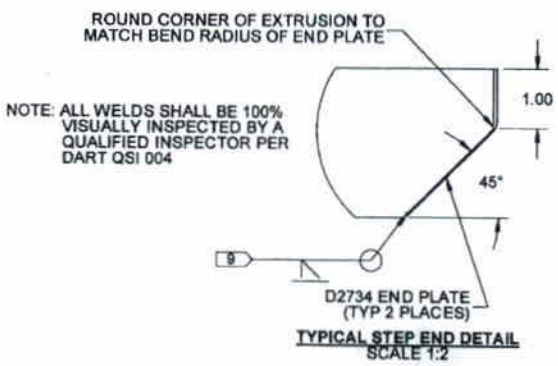
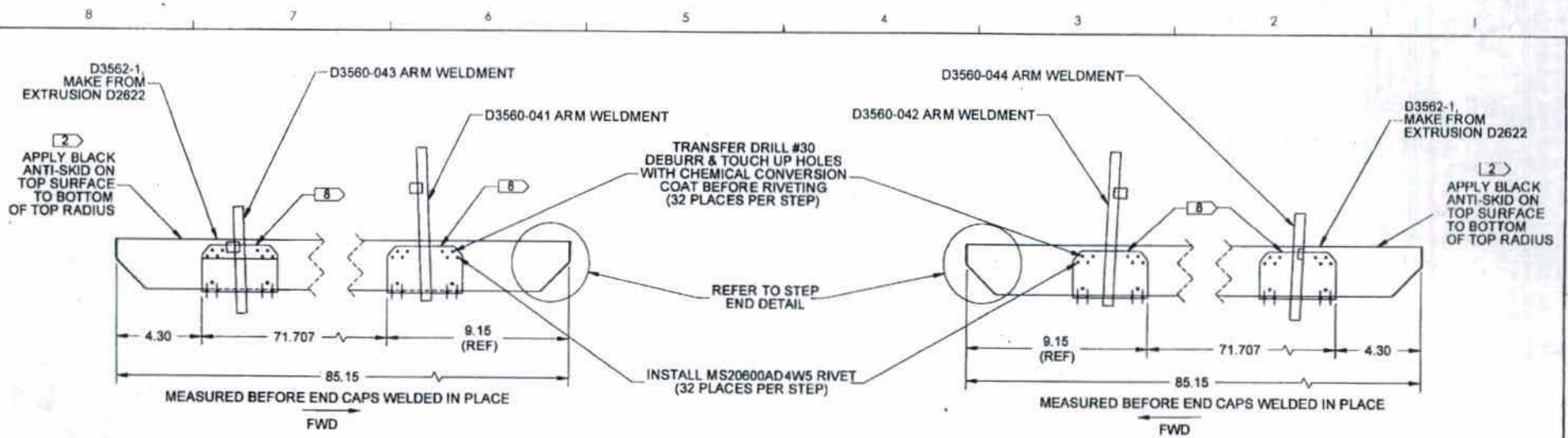
Comment: FINAL INSPECTION/W/O RELEASE

09/03/10 (1)

Job Completion



mf
09-03-10



D3562-041 LH STEP ASSEMBLY

D3562-042 RH STEP ASSEMBLY

NOT TO SCALE
1) MATERIAL: N/A
2) WORKMANSHIP: N/A
3) CONTROL: N/A
4) RETURN: N/A
5) ENGINEER: N/A
6) SUBJECT TO: N/A
7) WORKMANSHIP: N/A
8) CONTROL: N/A
9) RETURN: N/A
10) ENGINEER: N/A
11) SUBJECT TO: N/A

- i) CHEMICAL CONVERSION COAT STEP EXTRUSION PER DART QSI 005 4.1 BEFORE ASSEMBLY
- ii) POWDER COAT ASSEMBLY GLOSS WHITE (4.3.5.1) OR GREY SANDTEX (4.3.5.6) OR BLACK SANDTEX (4.3.5.7) OR GREEN SANDTEX (4.3.5.8) PER DART QSI 005 4.3
- iii) BLACK ANTI-SKID PAINT PER DART QSI 005 4.4
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 8.79 lbs
- 8) INSTALL ARM WELDMENTS WITH A LAYER OF MAGNOBOND 6398 BETWEEN THE ARM WELDMENT AND STEP EXTRUSION. FILL ANY TOOLING HOLES WITH MAGNOBOND 6398. CLEAN OFF EXCESS BEFORE POWDER COATING.
- 9) WELDING: PER DART QSI 004

QTY -041	QTY -042	P/N	DESCRIPTION
X		D3562-041	LH STEP ASSEMBLY
	X	D3562-042	RH STEP ASSEMBLY
1		D3560-041	ARM WELDMENT
	1	D3560-042	ARM WELDMENT
1		D3560-043	ARM WELDMENT
	1	D3560-044	ARM WELDMENT
32	32	MS20600AD4WS	RIVET
2	2	D2734	END PLATE

E	ADD QTY (2) TO D2734 END PLATE ON D3562-042	PH	08.01.11
D	REMOVE D2808 SPACER NOTE; REDRAWN IN SOLIDWORKS	DC	07.11.16
C	NOW MAGNOBOND, ADD D2808, REMOVE 4 RIVETS	CP	07.06.19
B	ARMS NOW RIVETED TO STEP	CP	07.01.15
A	NEW ISSUE	CP	06.09.26
REV.	DESCRIPTION	BY	DATE
DESIGN			
DRAWN			
CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.01.11		

DART AEROSPACE LTD
HAWKESBURY, ONTARIO, CANADA
DRAWING NO. **D3562**
REV. E
SHEET 1 OF 1
TITLE **STEP ASSEMBLY**
SCALE 1:5
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